

ABSTRACT OF THE DISCLOSURE

In an internal combustion engine with a fuel cell in an exhaust system, fuel for power generation is able to be supplied to the fuel cell without regard to the operating condition of the internal combustion engine. The fuel cell has a fuel electrode side thereof connected with an exhaust passage of the engine. A fuel supply system supplies the power generation fuel to the exhaust passage at a location downstream of the engine and upstream of the fuel cell. A supply amount control part controls an amount of the power generation fuel supplied by the fuel supply system. According to such a construction, the power generation fuel can be supplied to the fuel cell by the fuel supply system so as to generate electricity without depending on the operating condition of the engine.